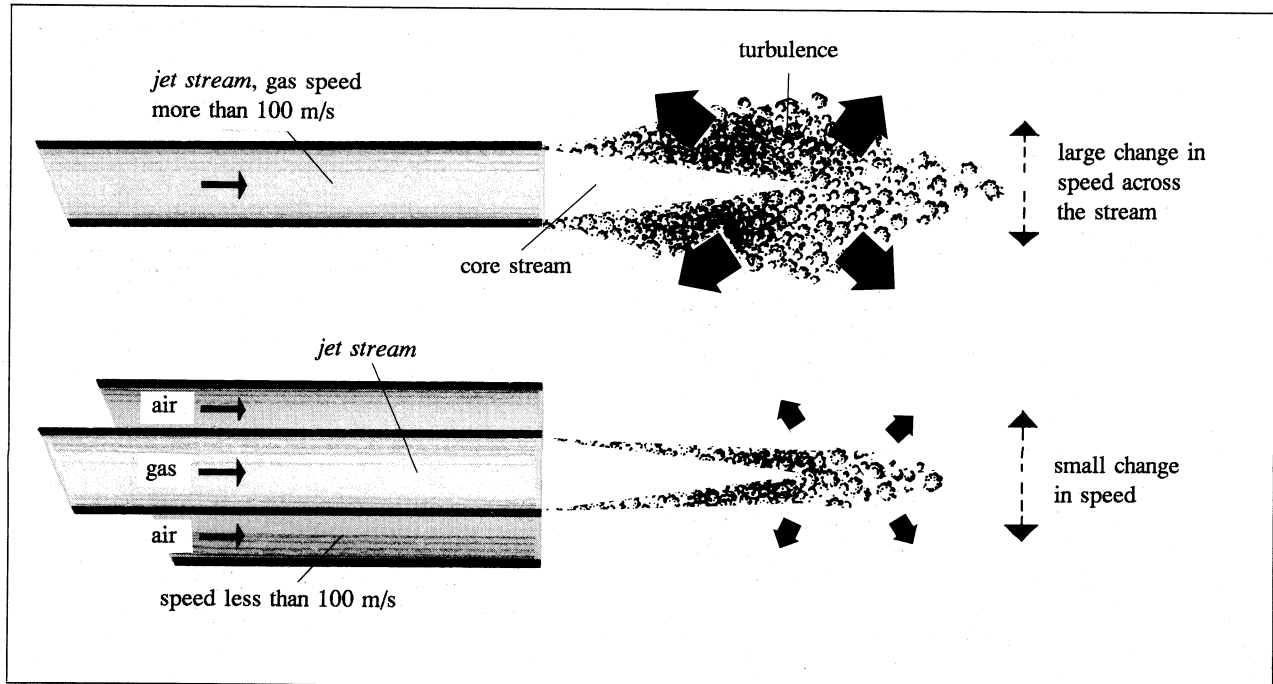


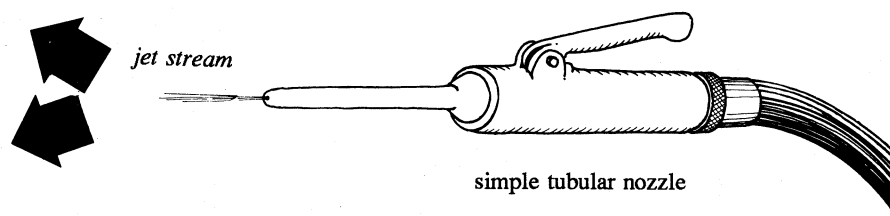
JET NOISE CAN BE REDUCED BY USING AN EXTRA AIR STREAM

The term *jet stream* applies at flow speeds in excess of 100 meters/second. Turbulence at the exit is high. Reducing the exit speed by one half may decrease the noise level by as much as 20 dB. Since the noise level is determined by the speed of the jet stream relative to the speed of the surrounding air, noise emission can be greatly reduced by using an air stream with a lower speed surrounding the jet stream.

Principle

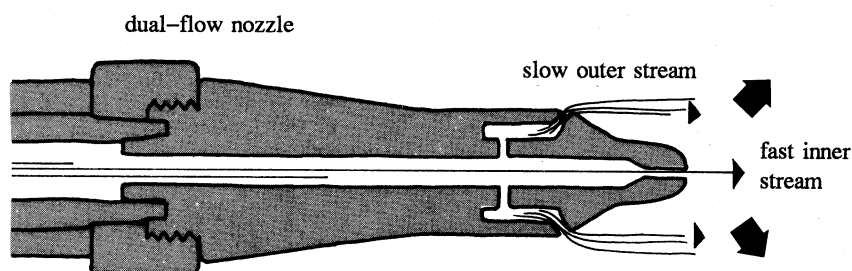


Application with compressed air



Example

The cleaning of machine parts with compressed air is often carried out with a simple tubular nozzle. Very high exit speeds are required, producing high levels of high-frequency noise.



Control Measure

The simple tubular nozzle can be replaced by a dual-flow nozzle which produces less noise. In this nozzle, some of the compressed air moves at a lower speed outside the central stream.

cleaning with compressed air

